

Application Serial No. 10/572,725  
Reply to final office action of March 31, 2009

PATENT  
Docket: CU-4700

**Remarks and Arguments**

Reconsideration is respectfully requested.

Claims 1-20 are pending in the present application before this amendment. By the present amendment, claims 2, 4-7, and 9-20 are canceled without prejudice; claims 1, 3 and 8 have been amended. No new matter has been added.

**In the office action (page 2), the examiner rejects claims 1-15 and 17-19 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,089,032 (Hongo) in view of U.S. Patent No. 7,085,587 (Oono), U.S. Publication No. 2004/0048591 (Kim) and further in view of U.S. Patent Publication No. 2003/0119467 (Welland).**

The applicants disagree and submit that the claims, as they now stand, are in condition for allowance.

After reviewing the Hongo, Oono, Kim and Welland references, the applicants found that only Kim reference is relevant to the present invention, in that it discloses a multiband RF transceiver that is capable of using a control voltage generated by a phase locked loop (PLL) to control a low noise amplifier (LNA), a mixer and a power amplifier (PA) as well as a voltage controlled oscillator (VCO), which allows them to operate at more than one frequency band.

However, the control voltage used in the transceiver of KIM reference is an analog control signal. When components such as a LNA, a mixer and a PA are controlled by the analog control signal, they degrade the signal linearity due to the nonlinear characteristic. Therefore, it is not practicable to use the analog control signal in controlling a LNA, a mixer or a PA.

On the other hand, the main feature of the present invention is that it uses a digital frequency control voltage (VDT) signal only or the VDT signal and an analog frequency control voltage (VAT) signal both, in order to control at least one of the receive amplifier, the receive mixer, the transmit mixer and the transmit amplifier. At least one of them has a resonant unit, which is controlled by only the VDT signal or by both the VDT and VAT signals. (Please see pages 8-9, block [45] of the specification.). Therefore, the present invention is quite different from the disclosure of KIM reference.

Therefore, Hongo, Oono, Kim, and Welland cannot support an obviousness

Application Serial No. 10/572,725  
Reply to final office action of March 31, 2009

PATENT  
Docket: CU-4700

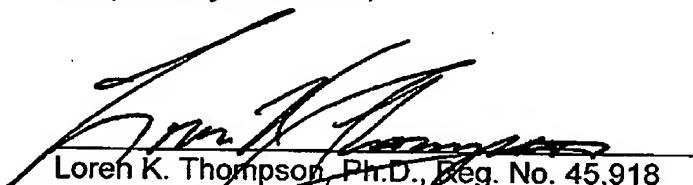
rejection to the presently claimed invention because Hongo, Oono, Kim, and Welland, in whole or in combination, do not teach or suggest all of the requirements of the presently claimed invention. Accordingly, the examiner is respectfully requested to withdraw this rejection.

**In the office action (page 8), the examiner rejects claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Hongo, in view of Oono, Kim, Welland and further in view of U.S. Patent No. 7,299,018 (Van Rumpt).**

The applicants have subsequently canceled claim 16, without prejudice, and therefore removed the basis for this rejection. Accordingly, the examiner is respectfully requested to withdraw this rejection.

For the reasons set forth above, the applicants respectfully submit that claims 1, 3, and 8, now pending in this application, are in condition for allowance over the cited references. Accordingly, the applicant respectfully requests reconsideration and withdrawal of the outstanding rejections and earnestly solicits an indication of allowable subject matter. This amendment is considered to be responsive to all points raised in the office action. Should the examiner have any remaining questions or concerns, the examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,



Loreh K. Thompson, Ph.D., Reg. No. 45,918  
Ladas & Parry  
224 South Michigan Avenue  
Chicago, Illinois 60604  
(312) 427-1300

Dated: May 26, 2009